

What is Claimed is:

1. A method for aiding a user who is viewing a program airing on a current channel in identifying another program to view, comprising:
 - monitoring which television programming is viewed by the user;
 - determining at least one program attribute of the monitored television programming;
 - identifying program listings for programs that are suggested based on the program attribute; and
 - allowing the user to browse the program listings for the suggested programs by displaying the program airing on the current channel and simultaneously displaying a display region containing the program listing for one of the suggested programs.
2. The method of claim 1 wherein the determining comprises determining whether the program airing on the current channel has been viewed for a predetermined period.
3. The method of claim 1 wherein the program attribute is selected from the consisting of program title, program actors, program duration, program genre, program channel, scheduled program duration, program rating, and program content rating.
4. The method of claim 1 further comprising:
 - displaying available program attributes;
 - and

allowing the user to select which available program attributes are to be used in identifying program listings.

5. The method of claim 1 wherein the identifying further comprises identifying program listings based on plural program attributes.

6. The method of claim 1 further comprising associating a user-selectable weight with each program attribute.

7. The method of claim 6 wherein the identifying comprises identifying the program listing based on the plural determined attributes and associated weights.

8. The method of claim 1 wherein the determining comprises determining the last displayed program which was viewed for a substantial portion of the program length.

9. The method of claim 1 further comprising:

determining from the monitored television programming which earlier programs were viewed;

determining when the earlier programs were viewed; and

determining how long each earlier program was viewed.

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10. The method of claim 9 wherein identifying comprises:

training a neural network using as training stimuli the determined program attributes, which programs were viewed, how long the programs were viewed, and when the programs were viewed; and

applying attributes of available programs to the trained neural network to identify program listings.

11. The method of claim 10 further comprising calibrating the trained neural network to match viewing interests.

12. The method of claim 11 further comprising selecting to use attributes of a specific program in training the neural network.

13. The method of claim 11 further comprising ignoring selected program types in training the neural network.

14. The method of claim 1 further comprising selectively associating with each of plural users a different program attribute to be determined.

15. The method of claim 1 wherein the display region is an overlay.

16. The method of claim 1 wherein the displaying comprises displaying a video display region having compressed video of the program airing on the

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17. The method of claim 1 wherein the displaying further comprising displaying an on-screen confirmation portion confirming that user program identifying is being aided.

19. The method of claim 17 wherein the displaying on-screen confirmation portion comprises displaying a textual on-screen confirmation portion.

21. The method of claim 20 further comprising displaying one of the suggested programs in response to the user selecting the program listing contained in the display region.

22. The method of claim 20 further comprising displaying selectable options for accessing one of the suggested programs in response to the user selecting the program listing contained in the display region.

23. The method of claim 1 further comprising selectively enabling user program identifying that is aided.

24. The method of claim 1 further comprising allowing the user to invoke the displaying.

25. The method of claim 1 wherein the identifying comprises building a list of program listings from a program listings database stored at user television equipment.

26. The method of claim 1 further comprising allowing the user to select to use at least one attribute of the current program in identifying program listings.

27. A system for aiding a user who is viewing a program airing on a current channel in identifying another program to view, comprising:

means for monitoring which television programming is viewed by the user;

means for determining at least one program attribute of the monitored television programming;

means for identifying program listings for programs that are suggested based on the program attribute; and

means for allowing the user to browse the program listings for the suggested programs by displaying the program airing on the current channel and simultaneously displaying a display region

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28. The system of claim 27 wherein said means for determining determines whether the program airing on the current channel has been viewed for a predetermined period.

30. The system of claim 27 further comprising:

means for allowing the user to select which available program attributes are to be used in identifying program listings.

32. The system of claim 27 further comprising means for associating a user-selectable weight with each program attribute.

33. The system of claim 29 wherein said means for identifying identifies the program listing

34. The system of claim 27 wherein said means for determining determines the last displayed program which was viewed for a substantial portion of the program length.

means for determining from the monitored television programming which earlier programs were viewed;

means for determining how long each earlier program was viewed.

means for training a neural network using as training stimuli the determined program attributes, which programs were viewed, how long the programs were viewed, and when the programs were viewed; and

37. The system of claim 36 further comprising means for calibrating the trained neural network to match viewing interests.

46. The system of claim 27 further comprising means for allowing the user to select the program listing contained in the display region.

48. The system of claim 46 further comprising means for displaying selectable options for accessing one of the suggested programs in response to the user selecting the program listing contained in the display region.

49. The system of claim 27 further comprising means for selectively enabling user program identifying that is aided.

50. The system of claim 27 further comprising means for allowing the user to invoke the displaying of the display region by said means for displaying.

51. The system of claim 27 wherein said means for identifying comprises means for building a list of program listings from a program listings database stored at user television equipment.

52. The system of claim 27 further comprising means for allowing the user to select to use at least one attribute of the current program in identifying program listings.

53. A system for aiding a user who is viewing a program airing on a current channel in identifying another program to view, comprising:

user television equipment on which an interactive television program guide is at least partially implemented, wherein the user television equipment is configured to monitor which television programming is viewed by the user, determine at least one program attribute of the monitored television programming, and identify program listings for programs that are suggested based on the program attribute, and the user television equipment is further configured to allow the user to browse the program listings for the suggested programs by displaying the program airing on the current channel and simultaneously displaying a display region containing the program listing for one of the suggested programs.

54. The system of claim 53 wherein the user television equipment is configured to determine whether the program airing on the current channel has been viewed for a predetermined period.

55. The system of claim 53 wherein the program attribute is selected from the consisting of program title, program actors, program duration,

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program genre, program channel, scheduled program duration, program rating, and program content rating.

56. The system of claim 53 wherein the user television equipment is further configured to display available program attributes, and to allow the user to select which available program attributes are to be used in identifying program listings.

57. The system of claim 53 wherein the user television equipment configured to identify program listings based on plural program attributes.

58. The system of claim 53 wherein the user television equipment is further configured to associate a user-selectable weight with each program attribute.

59. The system of claim 58 wherein the user television equipment is configured to identify the program listing based on the plural determined attributes and associated weights.

60. The system of claim 52 wherein the user television equipment is configured to determine the last displayed program which was viewed for a substantial portion of the program length.

61. The system of claim 52 wherein the user television equipment is further configured to determine from the monitored television programming which earlier programs were viewed, determine when the earlier

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68. The system of claim 52 wherein the user television equipment is configured to display a video display region having compressed video of the program airing on the current channel and simultaneously displays the display region containing the program listing for one of the suggested programs.

69. The system of claim 52 wherein the user television equipment is further configured to display an on-screen confirmation portion confirming that user program identifying is being aided.

70. The system of claim 69 wherein the user television equipment is configured to display an iconic on-screen confirmation portion.

71. The system of claim 69 wherein the user television equipment is configured to display a textual on-screen confirmation portion.

72. The system of claim 52 wherein the user television equipment is further configured to allow the user to select the program listing contained in the display region.

73. The system of claim 72 wherein the user television equipment is further configured to display one of the suggested programs in response to the user selecting the program listing contained in the display region.

74. The system of claim 72 wherein the user television equipment is further configured to display selectable options for accessing one of the suggested programs in response to the user selecting the program listing contained in the display region.

75. The system of claim 52 wherein the user television equipment is further configured to enable user program identifying that is aided.

76. The system of claim 75 wherein the user television equipment is further configured to allow the user to invoke the displaying of the display region.

77. The system of claim 75 wherein the user television equipment is configured to build a list of program listings from a program listings database stored at the user television equipment.

78. The system of claim 52 wherein the user television equipment is further configured to allow the user to select to use at least one attribute of the current program in identifying in identifying program listings.

79. A method for aiding a user in identifying a program to view, comprising:
monitoring which television programming is viewed by the user;
determining at least one program attribute of the monitored television programming;

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identifying program listings for current programs based on the program attribute;

allowing the user to tune to only those channels that are associated with the identified program listings when the user changes channels to display current programs; and

displaying the identified program listing for each current program at the same time that each current program is displayed.

80. The method of claim 79 wherein the determining comprises determining whether a currently displayed program has been viewed for a predetermined period.

81. The method of claim 79 wherein the program attribute may be selected from the consisting of program title, program actors, program duration, program genre, program channel, scheduled program duration, program rating, and program content rating.

82. The method of claim 79 further comprising:

displaying available program attributes;
and

allowing the user to select which available program attributes are to be used in identifying program listings.

83. The method of claim 79 wherein the identifying further comprises identifying program listings based on plural program attributes.

2025 RELEASE UNDER E.O. 14176

85. The method of claim 84 wherein the identifying comprises identifying the program listing based on the plural determined attributes and associated weights.

87. The method of claim 79 further comprising:

determining when the earlier programs were viewed; and

88. The method of claim 79 wherein identifying comprises:

training a neural network using as training stimuli the determined program attributes, which programs were viewed, how long the programs were viewed, and when the programs were viewed; and

confirmation portion confirming that user program identifying is being aided.

96. The method of claim 95 wherein the displaying on-screen confirmation portion comprises displaying an iconic on-screen confirmation portion.

97. The method of claim 95 wherein the displaying on-screen confirmation portion comprises displaying a textual on-screen confirmation portion.

98. The method of claim 79 further comprising allowing the user to select the displayed program listing.

99. The method of claim 79 further comprising selectively enabling user program identifying that is aided.

100. The method of claim 79 further comprising allowing the user to invoke the displaying.

101. The method of claim 79 wherein the identifying comprises building a list of program listings from a program listings database stored at user television equipment.

102. The method of claim 79 further comprising selecting to use attributes of an initially displayed program in identifying program listings.

00330793-064400

means for displaying the identified program listing for each current program at the same time that each current program is displayed.

105. The system of claim 103 wherein the program attribute may be selected from the consisting of program title, program actors, program duration, program genre, program channel, scheduled program duration, program rating, and program content rating.

means for displaying available program attributes; and

means for allowing the user to select which available program attributes are to be used in identifying program listings.

107. The system of claim 103 wherein said means for identifying identifies program listings based on plural program attributes.

108. The system of claim 103 further comprising means for associating a user-selectable weight with each program attribute.

109. The system of claim 108 wherein said means for identifying identifies the program listing based on the plural determined attributes and associated weights.

110. The system of claim 103 wherein said means for determining determines the last displayed program which was viewed for a substantial portion of the program length.

111. The system of claim 103 further comprising:

means for determining from the monitored television programming which earlier programs were viewed;

means for determining when the earlier programs were viewed; and

means for determining how long each earlier program was viewed.

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means for training a neural network using as training stimuli the determined program attributes, which programs were viewed, how long the programs were viewed, and when the programs were viewed; and

113. The system of claim 112 further comprising means for calibrating the trained neural network to match viewing interests.

115. The system of claim 113 further comprising means for ignoring selected program types in training the neural network.

117. The system of claim 103 wherein said means for displaying comprises means for displaying a display region for the identified program listing.

118. The system of claim 103 wherein said means for displaying displays the identified program listing for each current program at the same time that a video display region having compressed video for each current program is displayed.

119. The system of claim 103 wherein said means for displaying comprises means for displaying an on-screen confirmation portion confirming that user program identifying is being aided.

120. The system of claim 119 wherein the on-screen confirmation portion is iconic.

121. The system of claim 119 wherein the on-screen confirmation portion is textual.

122. The system of claim 103 further comprising means for allowing the user to select the displayed program listing.

123. The system of claim 103 further comprising means for selectively enabling user program identifying that is aided.

124. The system of claim 103 further comprising means for allowing the user to invoke the displaying.

125. The system of claim 103 wherein said means for identifying comprises means for building a

00330793:064400



132. The system of claim 127 wherein the user television equipment is further configured to associate a user-selectable weight with each program attribute.

134. The system of claim 127 wherein the user television equipment is configured to determine the last displayed program which was viewed for a substantial portion of the program length.

135. The system of claim 127 wherein the user television equipment is further configured to determine from the monitored television programming which earlier programs were viewed, determine when the earlier

programs were viewed, and determine how long each earlier program was viewed.

136. The system of claim 135 wherein the user television equipment is further configured to train a neural network using as training stimuli the determined program attributes, which programs were viewed, how long the programs were viewed, and when the programs were viewed, and to apply program attributes of available programs to the trained neural network to identify program listings.

137. The system of claim 136 wherein the user television equipment is further configured to calibrate the trained neural network to match viewing interests.

138. The system of claim 137 wherein the user television equipment is further configured to select a specific program for using attributes of the specific program in training the neural network.

139. The system of claim 137 wherein the user television equipment is configured to ignore selected program types in training the neural network.

140. The system of claim 127 wherein the user television equipment is further configured to selectively associate with each of plural users a different program attribute to be determined.

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142. The system of claim 127 wherein the user television equipment is configured to display the identified program listing for each current program at the same time that a video display region having compressed video for each current program is displayed.

144. The system of claim 143 wherein the on-screen confirmation portion is iconic.

145. The system of claim 143 wherein the on-screen confirmation portion is textual.

146. The system of claim 127 wherein the user television equipment is further configured to allow the user to select the displayed program listing.

147. The system of claim 127 wherein the user television equipment is further configured to selectively enable user program identifying that is aided.

148. The system of claim 127 wherein the user television equipment is further configured to allow the user to invoke the displaying.

149. The system of claim 127 wherein the user television equipment is configured to build a list of program listings from a program listings database stored at user television equipment.

150. The system of claim 127 wherein the user television equipment is further configured to select an initially displayed program for using attributes of the initially displayed program in identifying program listings.

151. An interactive television program guide system for aiding a user in identifying programs for viewing, comprising:

user television equipment on which an interactive television program guide is at least partially implemented, wherein:

the user television equipment is configured to display a television screen having video of a current program airing on a current channel;

the user television equipment is configured to allow the user to sequentially browse program listings for available programming by selectively displaying for each program listing a display region on the television screen;

the user television equipment is configured to limit which program listings are displayed in the display region based on various

Lat	Long	Altitude	Temp	Wind	Clouds	Remarks
42° 10' N	143° 10' W	1000	50	10	0	Clear
42° 00' N	143° 00' W	1000	50	10	0	Clear
41° 50' N	142° 50' W	1000	50	10	0	Clear
41° 40' N	142° 40' W	1000	50	10	0	Clear
41° 30' N	142° 30' W	1000	50	10	0	Clear
41° 20' N	142° 20' W	1000	50	10	0	Clear
41° 10' N	142° 10' W	1000	50	10	0	Clear
41° 00' N	142° 00' W	1000	50	10	0	Clear
40° 50' N	141° 50' W	1000	50	10	0	Clear
40° 40' N	141° 40' W	1000	50	10	0	Clear
40° 30' N	141° 30' W	1000	50	10	0	Clear
40° 20' N	141° 20' W	1000	50	10	0	Clear
40° 10' N	141° 10' W	1000	50	10	0	Clear
40° 00' N	141° 00' W	1000	50	10	0	Clear
39° 50' N	140° 50' W	1000	50	10	0	Clear
39° 40' N	140° 40' W	1000	50	10	0	Clear
39° 30' N	140° 30' W	1000	50	10	0	Clear
39° 20' N	140° 20' W	1000	50	10	0	Clear
39° 10' N	140° 10' W	1000	50	10	0	Clear
39° 00' N	140° 00' W	1000	50	10	0	Clear
38° 50' N	139° 50' W	1000	50	10	0	Clear
38° 40' N	139° 40' W	1000	50	10	0	Clear
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38° 10' N	139° 10' W	1000	50	10	0	Clear
38° 00' N	139° 00' W	1000	50	10	0	Clear
37° 50' N	138° 50' W	1000	50	10	0	Clear
37° 40' N	138° 40' W	1000	50	10	0	Clear
37° 30' N	138° 30' W	1000	50	10	0	Clear
37° 20' N	138° 20' W	1000	50	10	0	Clear
37° 10' N	138° 10' W	1000	50	10	0	Clear
37° 00' N	138° 00' W	1000	50	10	0	Clear
36° 50' N	137° 50' W	1000	50	10	0	Clear
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34° 00' N	135° 00' W	1000	50	10	0	Clear
33° 50' N	134° 50' W	1000	50	10	0	Clear
33° 40' N	134° 40' W	1000	50	10	0	Clear
33° 30' N	134° 30' W	1000	50	10	0	Clear

153. The system of claim 151 wherein the user television equipment is configured to allow the user to select the displayed program listing to access the program associated with the displayed program listing.

154. The system of claim 151 wherein the user television equipment is configured to limit which program listings are displayed by using a neural network.

155. The system of claim 151 wherein the display region is an overlay.

156. An interactive television program guide system for aiding a user in identifying programs for viewing, comprising:

means for displaying a television screen having video of a current program airing on a current channel;

means for allowing the user to sequentially browse program listings for available programming by selectively displaying for each program listing a display region on the television screen;

means for limiting which program listings are displayed in the display region based on various program attributes of television programs that have been viewed by the user; and

means for allowing the user to adjust the relative importance of various program attributes that are used to limit the displayed program listings.

157. The system of claim 156 wherein said means for limiting comprises means for building a list of program listings from a program listings database based on the various program attributes of television programs that have been viewed by the user.

158. The system of claim 156 further comprising means for allowing the user to select the displayed program listing to access the program associated with the displayed program listing.

159. The system of claim 156 wherein said means for limiting comprises means for using a neural network to limit which program listings are displayed.

160. The system of claim 156 wherein the display region is an overlay.

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165. The method of claim 161 wherein the display region is an overlay.

166. An interactive television program guide system for aiding a user in identifying programs for viewing, comprising:

user television equipment on which an interactive television program guide is at least partially implemented, wherein:

the user television equipment is configured to allow the user to sequentially flip through current programs and related program listings by selectively displaying a television screen having video of one of the current programs and at the same time displaying a display region on the television screen having the related program listing for the displayed program;

the user television equipment is configured to limit which current programs are displayed and which related program listings are simultaneously displayed in the television screen based on various program attributes of television programs that have been viewed by the user; and

the user television equipment is configured to allow the user to adjust the relative importance of the various program attributes that are used to limit the displayed current program.

167. The system of claim 166 wherein the user television equipment is configured to limit by building a list of programs from a program listings database

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168. The system of claim 166 wherein the user television equipment is configured to limit which program listings are displayed by using a neural network.

170. An interactive television program guide system for aiding a user in identifying programs for viewing, comprising:

means for limiting which current programs are displayed and which related program listings are simultaneously displayed in the television screen based on various program attributes of television programs that have been viewed by the user; and

means for allowing the user to adjust the relative importance of the various program attributes that are used to limit the displayed current program.

172. The system of claim 170 wherein said means for limiting comprises means for using a neural network to limit which programs and program listings are displayed.

174. An interactive television program guide system for aiding a user in identifying programs for viewing, comprising:

limiting which current programs are displayed and which related program listings are simultaneously displayed in the television screen based on various program attributes of television programs that have been viewed by the user; and

allowing the user to adjust the relative importance of the various program attributes that are used to limit the displayed current program.

176. The method of claim 174 wherein limiting comprises using a neural network to limit which program listings are displayed.

177. The method of claim 174 wherein the display region is an overlay.